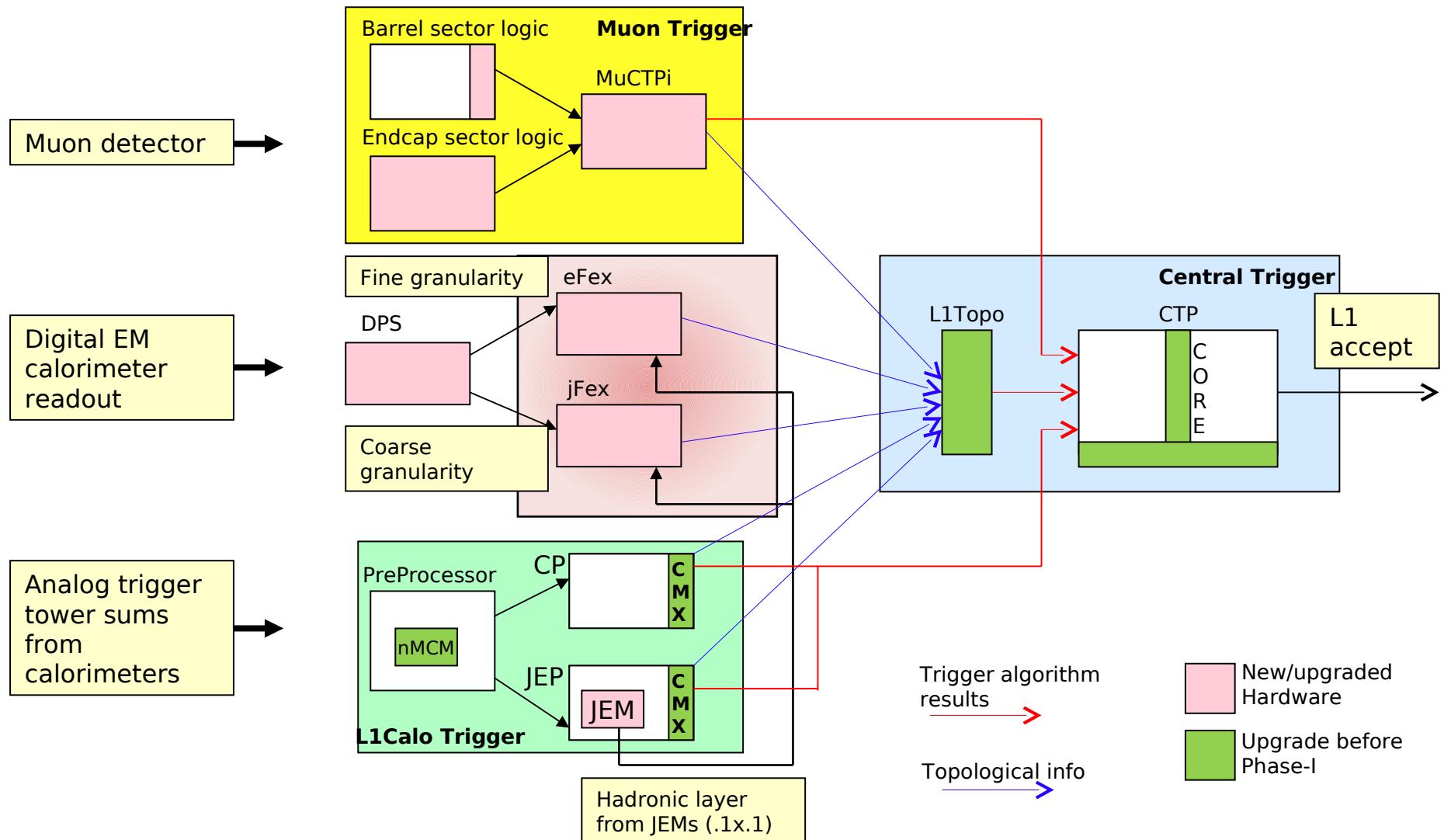


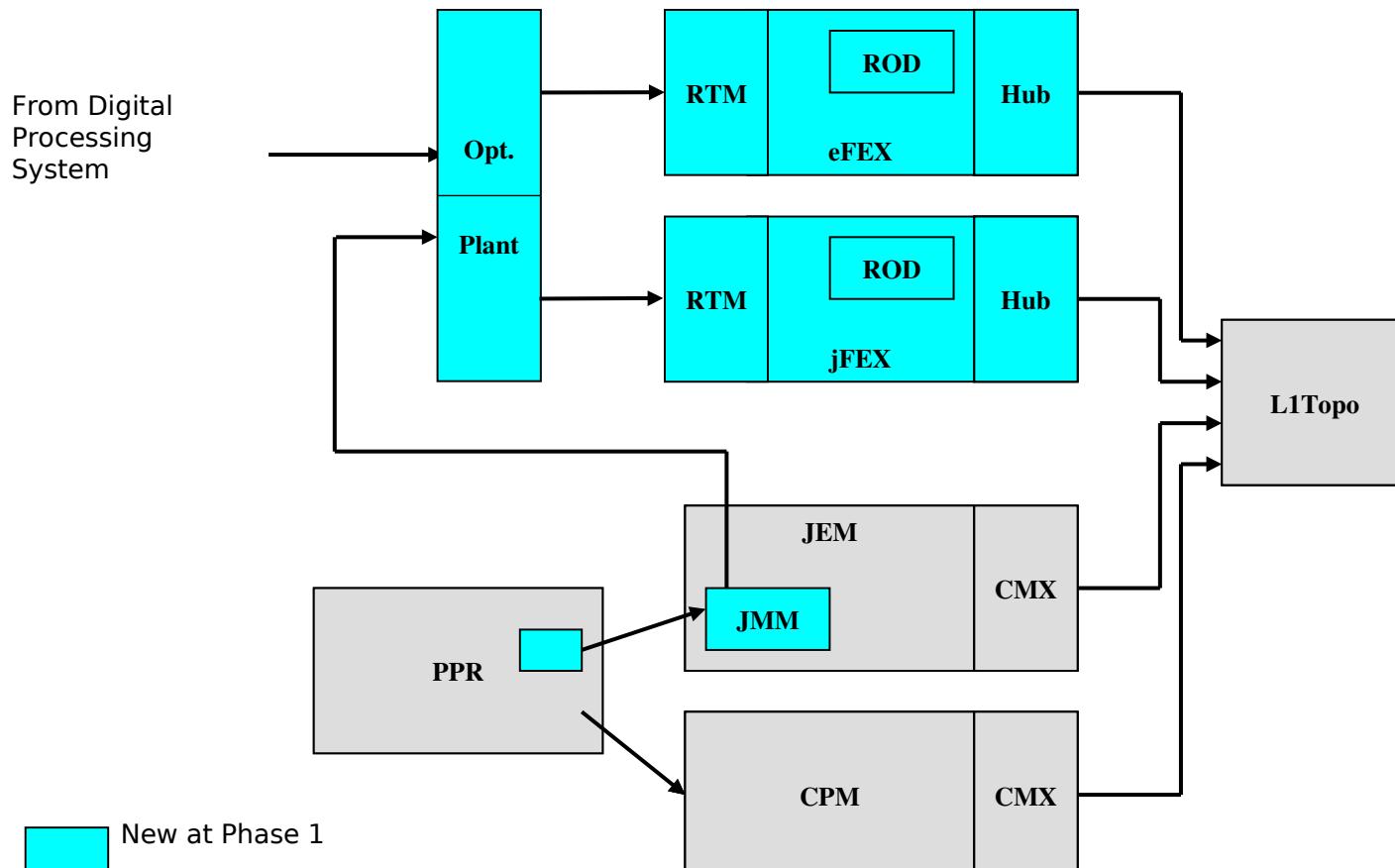


L1Calo at Phase 1





Phase 1 L1Calo: Details





US L1Calo: Projects



Phase 0 (well established)

- CMX Production (MSU) – only FY14
 - > FY13,15 funded from M&O

Phase 1 (still under discussion – Kickoff meeting 21 Jan, 2013)

- L1Calo Firmware (MSU, Oregon) – exact project tbd
 - > e/jFEX: feature extraction algo, merging algo, rate monitoring, testing
 - > ROD logic (eFEX & jFEX)
 - > ATCA: high-level control, low-level control/monitoring, hub logic
 - > High speed transceiver logic
 - > TTC interface
 - > Test Module: data source/sink logic
- eFEX/jFEX ROD daughterboard (MSU)
- eFEX/jFEX(?) Fiber Plant (MSU)
- TileCal --> jFEX transmission (???)
 - > other groups have expressed interest here



US L1Calo: Cost Estimate



Bottoms-up cost estimate

- Phase 0 (CMX): waiting for latest estimate (no big changes expected)
- Phase 1: most numbers only available yesterday
- first (unreliable) contingency estimate made

LHC ATLAS-U TDAQ

WBS	WBS Name	BoE ref No.	Base Estimate (k\$)		
			Labor	M&S	Total
1.3	<i>TDAQ Upgrade</i>		1,952.428	850.285	2,802.713
1.3.1	<i>L1Calo Trigger</i>		1,952.428	850.285	2,802.713
1.3.1.1	CMX		251.715	198.285	450.000
1.3.1.1.1	CMX: Design		-	-	-
1.3.1.1.2	CMX: Prototyping		-	-	-
1.3.1.1.3	CMX: Production		251.715	198.285	450.000
1.3.1.2	<i>Firmware</i>		908.148	28.000	936.148
1.3.1.2.1	Firmware: Design		908.148	28.000	936.148
1.3.1.3	<i>e/jFEX ROD</i>		534.385	368.000	902.385
1.3.1.3.1	e/jFEX ROD: Design		92.111	4.000	96.111
1.3.1.3.2	e/jFEX ROD: Prototype		189.748	64.000	253.748
1.3.1.3.3	e/jFEX ROD: Production		252.527	300.000	552.527
1.3.1.4	<i>e/jFEX Fiber Plant</i>		258.180	256.000	514.180
1.3.1.4.1	e/jFEX Fiber Plant: Design		127.182	-	127.182
1.3.1.4.2	e/jFEX Fiber Plant: Prototype		-	-	-
1.3.1.4.3	e/jFEX Fiber Plant: Production		130.998	256.000	386.998